



Effects of Management of Physical Resources for Quality Education Delivery in Ignatius Ajuru University of Education in Rivers State

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ABSTRACT

This study examined the effects of management of physical resources for quality education delivery in Ignatius Ajuru University of Education in Rivers State. Three research questions and hypotheses were put forward to guide the study. The study employed the descriptive survey design. The study population comprised of administrative staff in Ignatius Ajuru University of Education (IAUOE) in Rivers State. A sample of 102 administrative staff was drawn from the university. The stratified random sampling technique was used in selecting the sample for the study. A structured questionnaire was used to elicit data from the respondents. Mean and Standard Deviation were used to analyze the responses received in the questionnaire while Z-test was used to test the hypotheses at 0.05 level of significance. The findings revealed that the extent of provision of physical resources is quite low for quality education delivery in IAUOE. It also revealed that the extent of maintenance of physical resources is quite low for quality education delivery in IAUOE. The study also reported that the major challenges to effective management of physical resources in IAUOE include: inadequate financial resources for the provision and maintenance of physical resources, mismanagement and misappropriation of the available funds, embezzlement of funds met for the provision and maintenance of resources, lack of skilled personnel to carry out maintenance activities, constant interference on the activities of the maintenance unit by the university management, politicization in awarding maintenance contract, and lack of proper monitoring of the maintenance contract awarded to individuals by the university management. Based on the findings, it was recommended that the management of the IAUOE should properly manage and maintain the available physical resources of the institution as it would enhance quality education delivery.

Keywords: Management, physical resources, instructional facilities, recreational facilities, residential facilities, quality education delivery.

INTRODUCTION

The issue of how to improve the quality of education delivery in Nigerian universities has received much attention in recent times. This is based on the fact that university education is considered as the most important instrument for human capital development in any society. University education is very important because it provides the manpower needed by the various industries and also prepare students for leadership position. Odekunle in Ekundayo and Ajayi (2009) posits that universities educate future leaders and develop the high-level technical capacities that underpin economic growth and development. Without quality education delivery, the products from the universities will be useless to the various industries and the society at large. For this reason, much attention is given to the standard and quality of education delivered by

universities in Nigeria. Every university is built to deliver qualitative education to students in order to ensure that the products from these universities serve the manpower needs of the various industries and the society at large. However, in order to university to improve the quality of education delivery, they must effectively manage the physical resources of the institution.

Physical resources in any university are those resources or facilities that facilitate the teaching and learning process. They include the infrastructures and instructional facilities in the institution (Ugwulashi, 2017). Anifowose and Lawal (2013) posit that the physical resources in universities include the instructional facilities (such as the school buildings, classrooms, tables, chairs, libraries, workshops, laboratories, experiment equipments, computers, and audio-visual learning equipments), recreational facilities (such as fields, lawns, sport pitches and sports equipments), and residential (accommodation) facilities (such as hotels, hostel facilities, staff quarters, and refectory facilities). The quality of education delivery in any university is assessed by adequate and proper management of these resources. Lawanson and Gede (2011) argue that the provision and management of the physical resources of an institution is the major index for measuring the standard and quality of education delivery in that institution. This paper examines the effects of management of physical resources for quality education delivery in Ignatius Ajuru University of Education in Rivers State.

Statement of the Problem

One of the major factors affecting the quality of education delivery in Nigerian universities is poor management of the physical resources of the institution. Evidence shows that the physical resources in many Nigerian universities are in a deplorable state. The National Universities Commission (2013) confirms this when it reports that the physical resources in many Nigerian universities are in a deplorable state and attributed this condition to lack of proper management of these resources. The Committee on Needs Assessment of Nigerian Universities as reported in Ezeugbor and Okorji (2014) also noted that very poor maintenance culture is costing Nigerian universities a lot of resources. Although the Committee acknowledged the fact that the physical facilities such as the classrooms, tables, chairs, libraries, workshops, laboratories, experiment equipments, computers, audio-visual learning equipments, sports equipments, hostels, staff quarters and refectory facilities in many universities are grossly inadequate for quality education delivery, it however observed that the available resources are poorly maintained.

However, it is not clear whether the physical resources in Ignatius Ajuru University of Education are inadequate for quality education delivery neither has any report showed the extent of maintenance of the available resources. Even the extent of maintenance of the available resources is yet to be ascertained. There is need to ascertain whether or not IAUOE is among the Nigerian universities that are faced with inadequate physical resources or poor monitoring and maintenance of the available resources. It is in view to ascertain this and make the necessary recommendations that prompted this study.

Purpose of the Study

The purpose of this study is to examine the effects of management of physical resources for quality education delivery in Ignatius Ajuru University of Education in Rivers State. The specific objectives of the study are:

1. To determine the extent of provision of physical resources for quality education delivery in Ignatius Ajuru University of Education.
2. To ascertain the extent of maintenance of physical resources for quality education delivery in Ignatius Ajuru University of Education.
3. To identify the challenges to effective management of physical resources for quality education delivery in Ignatius Ajuru University of Education.

Research Questions

The following questions are put forward to address the objectives of this study:

1. To what extent are physical resources provided for quality education delivery in Ignatius Ajuru University of Education?
2. To what extent are the available physical resources maintained for quality education delivery in Ignatius Ajuru University of Education?
3. What are the challenges to effective management of physical resources in Ignatius Ajuru University of Education?

Hypotheses

The following hypotheses are formulated to guide this study:

1. There is significant difference in the perceptions of male and female administrative staff on the extent of provision of physical resources for quality education delivery in Ignatius Ajuru University of Education in Rivers State.
2. There is no significant difference in the perceptions of male and female administrative staff on the extent of maintenance of physical resources for quality education delivery in Ignatius Ajuru University of Education in Rivers State.
3. There is no significant difference in the perceptions of male and female administrative staff on the challenges to effective management of physical resources in Ignatius Ajuru University of Education in Rivers State.

RESULTS AND DISCUSSION

Research Question 1

To what extent are physical resources provided for quality education delivery in Ignatius Ajuru University of Education?

Table 1: Mean responses of male and female administrative staff on the extent to which physical resources are provided for quality education delivery in their institution.

S/N	Indicate the level of provision of the following physical resources in your institution. Items	Male Administrative Staff		Female Administrative Staff		Mean Set $\bar{X}_1 \bar{X}_2$	SD Set SD ₁ SD ₂	Remarks
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂			
1.	Classroom blocks	2.41	0.53	2.36	0.38	2.39	0.46	Low
2.	Lecture theatre	2.33	0.65	2.46	0.41	2.40	0.53	Low
3.	Auditoria	2.54	0.67	2.50	0.55	2.52	0.61	High
4.	Libraries	2.47	0.52	2.24	0.39	2.36	0.46	Low
5.	Library Facilities	2.35	0.47	2.42	0.43	2.39	0.45	Low
6.	Laboratories	2.43	0.41	2.37	0.36	2.40	0.39	Low
7.	Laboratory Equipments	2.45	0.58	2.30	0.31	2.38	0.45	Low
8.	Workshops	2.30	0.47	2.43	0.41	2.37	0.44	Low
9.	Studios	2.51	0.61	2.57	0.60	2.54	0.61	High
10.	Hostel Accommodations.	2.43	0.45	2.38	0.38	2.41	0.42	Low
11.	Staff Offices.	2.34	0.33	2.39	0.32	2.37	0.33	Low
12.	ICT facilities	2.56	0.46	2.50	0.52	2.53	0.49	High
13.	Gymnasia	2.45	0.56	2.35	0.38	2.40	0.47	Low
14.	Recreational facilities	2.34	0.47	2.43	0.42	2.39	0.45	Low
15.	Vehicle and cars	2.46	0.59	2.29	0.33	2.38	0.46	Low
16.	Generators as back up for power failure	2.40	0.55	2.35	0.36	2.38	0.46	Low
17.	Adequate water supply	2.56	0.53	2.50	0.41	2.53	0.47	High
	Grand Mean/SD	2.43	0.52	2.40	0.41	2.42	0.47	

Table 1 shows the mean responses of male and female administrative staff on the extent of provision of physical resources for quality education delivery in their institution. From the table, it is observed that out of the 17 items, 13 of the responses fall below the criterion mean of 2.50 indicating that they are the physical resources that are not provided for quality education delivery in the university. However, the responses to items 3, 9, 12 and 17 are above the criterion of 2.50 indicating that they are the only physical resources that are provided for quality education delivery in the university. It therefore follows that the extent of provision of physical resources is quite low for quality education delivery in Ignatius Ajuru University of Education.

Research Question 2

To what extent are the available physical resources maintained for quality education delivery in Ignatius Ajuru University of Education?

Table 2: Mean responses of male and female administrative staff on the extent to which physical resources are maintained for quality education delivery in their institution.

S/N	Indicate the extent to which the following maintenance cultures are adopted in your university. Items	Male Administrative Staff		Female Administrative Staff		Mean Set $\bar{X}_1 \bar{X}_2$	SD Set SD ₁ SD ₂	Remarks
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂			
18.	Renovation of old buildings and structure.	2.41	0.89	2.49	0.93	2.45	0.90	Low
19.	Repairs of the broken chairs and tables in the classrooms.	2.48	0.94	2.45	0.84	2.47	0.89	Low
20.	Contacting technicians to fix the fans, air-conditioning and other facilities in the staff offices and students hostels.	2.51	1.03	2.59	0.96	2.55	1.00	High
21.	Regular servicing of generators, cars and other machines.	2.52	0.99	2.64	1.06	2.58	1.03	High
22.	Repairs of ICT facilities and taking measures to prevent malfunctioning.	2.46	0.76	2.39	0.84	2.43	0.80	Low
23.	Regular servicing of the school plants, machines and other equipments for proper functioning.	2.56	0.96	2.69	1.02	2.63	0.99	High
24.	Employing professionals outside the university to assist in resource maintenance.	2.40	0.78	2.48	0.96	2.44	0.87	Low
25.	Repairs of the laboratory and workshop equipments for proper functioning.	2.44	0.81	2.40	0.76	2.42	0.79	Low
26.	Regularly cleaning of the studios and Auditoria.	2.49	0.86	2.43	0.81	2.46	0.84	Low
27.	Repairs of the gymnasias and other recreational facilities	2.45	0.91	2.38	0.87	2.42	0.89	Low
Grand Mean/SD		2.47	0.89	2.49	0.91	2.48	0.90	

Table 2 shows the mean responses of male and female administrative staff on the extent of maintaining physical resources for quality education delivery in their institution. From the table, it is observed that out of the 10 items, only 3 items are above the criterion mean of 2.50 while 7 items falls below the criterion of 2.50 indicating that the university has a low maintenance culture

for quality education delivery. It therefore follows that the extent of maintenance of physical resources is quite low for quality education delivery in IAUOE.

Research Question 3

What are the challenges to effective management of physical resources in Ignatius Ajuru University of Education?

Table 3: Mean responses of male and female administrative staff on the challenges to effective management of physical resources for quality education delivery in their institution.

S/N	The following are the challenges hindering the effective management of physical resources in my university. Items	Male Administrative Staff		Female Administrative Staff		Mean Set	SD Set	Remarks
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂	$\bar{X}_1 \bar{X}_2$	SD ₁ SD ₂	
28.	Inadequate financial resources for the provision and maintenance of the physical resources.	2.89	1.02	2.52	0.98	2.71	1.00	Accepted
29.	Mismanagement and misappropriation of the available funds..	2.96	0.93	2.94	1.14	2.95	1.04	Accepted
30.	Embezzlement of funds met for the provision and maintenance of resources.	2.89	0.86	2.63	1.06	2.76	0.96	Accepted
31.	Lack of skilled personnel to carry out maintenance activities.	2.80	0.81	2.90	0.85	2.85	0.83	Accepted
32.	Constant interference of the university management on the activities of the maintenance unit.	2.86	0.91	2.91	1.09	2.89	1.00	Accepted
33.	Politicization in awarding maintenance contract.	2.73	0.84	2.81	0.90	2.77	0.87	Accepted
34.	Lack of proper monitoring of the maintenance contract awarded to individuals by the university management	2.61	0.93	2.86	1.09	2.74	1.01	Accepted
Grand Mean/SD		2.82	0.90	2.79	1.02	2.81	0.96	

Table 3 shows the mean responses of male and female administrative staff on the challenges to effective management of physical resources for quality education delivery in their institution. From the table, it is observed that respondents agreed with all the items listed in the table since their mean scores are greater than the criterion mean of 2.50. The grand mean scores of 2.82 and 2.79 for male and female administrative staff respectively are greater than criterion mean of 2.50 indicating that both respondents accepted the items in the table. This means that the challenges to effective management of physical resources in IAUOE include: inadequate financial resources, mismanagement and misappropriation of the available funds, embezzlement of funds met for the provision and maintenance of resources, lack of skilled personnel to carry out maintenance activities, constant interference on the activities of the maintenance unit by the university management, politicization in awarding maintenance contract, and lack of proper monitoring of the maintenance contract awarded to individuals by the university management.

Hypothesis 1

There is no significant difference in the perceptions of male and female administrative staff on the extent of provision of physical resources for quality education delivery in Ignatius Ajuru University of Education in Rivers State.

Table 4: Z-test result on the statistical testing of hypothesis one.

Respondents	N	Mean	SD	df	Sig. Level	Z-test Cal.	Z-test Crit.	Decision
Male Administrative Staff	47	2.43	0.52	100	0.05	1.12	±1.96	Ho ₁ Accepted
Female Administrative Staff	39	2.40	0.41					

Table 4 presents the result of the statistical testing of hypothesis one. From the table, it is observed that the calculated Z-test of 1.12 is greater than the critical value of Z-test (±1.96). As a result of this, we then upheld the null hypothesis which states that “there is no significant difference in the perceptions of male and female administrative staff on the extent of provision of physical resources for quality education delivery in Ignatius Ajuru University of Education in Rivers State.

Hypothesis 2

There is no significant difference in the perceptions of male and female administrative staff on the extent of maintenance of physical resources for quality education delivery in Ignatius Ajuru University of Education in Rivers State.

Table 5: Z-test result on the statistical testing of hypothesis two

Respondents	N	Mean	SD	df	Sig. Level	Z-test Cal.	Z-test Crit.	Decision
Male Administrative Staff	47	2.47	0.89	100	0.05	1.02	±1.96	Ho ₂ Accepted
Female Administrative Staff	39	2.49	0.91					

Table 5 shows the result of the statistical testing of hypothesis two. From the table, it is observed that the calculated Z-test of 1.02 is greater than the critical value of Z-test (±1.96). Consequently, the null hypothesis is accepted. This means that we then accept that there is no significant difference in the perceptions of male and female administrative staff on the extent of maintenance of physical resources for quality education delivery in Ignatius Ajuru University of Education in Rivers State.

Hypothesis 3

There is no significant difference in the perceptions of male and female administrative staff on the challenges to effective management of physical resources in Ignatius Ajuru University of Education in Rivers State.

Table 6: Z-test result on the statistical testing of hypothesis three

Respondents	N	Mean	SD	df	Sig. Level	Z-test Cal.	Z-test Crit.	Decision
Male Administrative Staff	47	2.82	0.90	100	0.05	1.09	±1.96	Ho ₃ Accepted
Female Administrative Staff	39	2.79	1.02					

Table 6 presents the result of the statistical testing of hypothesis three. The table shows that the calculated Z-test of 1.07 is greater than the critical value of Z-test (±1.96). Hence, the null hypothesis is upheld. This implies that we then accept that there is no significant difference in the perceptions of male and female administrative staff on the challenges to effective management of physical resources in Ignatius Ajuru University of Education in Rivers State.

DISCUSSION OF FINDINGS

It was discovered in this study that the extent of provision of physical resources is quite low for quality education delivery in Ignatius Ajuru University of Education (IAUOE). This finding was derived from the result of the analysis carried out on research question one which was presented in table 1. The result showed that the extent of provision of physical resources is very low for quality education delivery in IAUOE. This finding is consistent with the research conducted by Ezeugbor and Okorji (2014) which reported that the extent of provision of physical resources is quite low for effective management of universities in the South-East Zone of Nigeria. This finding is also supported by Musa & Ahmad (2012) who reported that the level of provision of physical resources such as instructional facilities in universities is very low for quality education delivery. The study conducted by Babatope (2010) also confirmed the inadequacy of physical resources in universities in South-West region of Nigeria.

The study also revealed that the extent of maintenance of physical resources is quite low for quality education delivery in Ignatius Ajuru University of Education. This finding was deduced from the result of the analysis carried out on second research question which was presented in table 2 above. The result indicated that the extent of maintenance of physical resources in IAUOE particularly in the areas of renovation of old buildings and structure, repairs of broken chairs and tables in the classrooms, repairs of ICT facilities and taking measures to prevent malfunctioning, repairs of the laboratory and workshop equipments for proper functioning, repairs of gymnasias and other recreational facilities, employing professionals outside the university to assist in resource maintenance and regularly cleaning of the studios and auditoria are quite low for quality education delivery in the institution. This finding is consistent with the research conducted by the Committee on Needs Assessment of Nigerian Universities which reported that very poor maintenance culture is costing Nigerian universities a lot of resources. However, this finding is supported by Anifowose & Lawal (2013) who noted that Nigerian universities are yet to inculcate good maintenance culture on the available resources through regular servicing and renovation of their old buildings and structures including the repairs of facilities in the classrooms, laboratories, staff offices and students hotels.

Finally, it was discovered that the major challenges to effective management of physical resources in IAUOE include: inadequate financial resources for the provision and maintenance of physical resources, mismanagement and misappropriation of the available funds, embezzlement of funds met for the provision and maintenance of resources, lack of skilled personnel to carry out maintenance activities, constant interference on the activities of the maintenance unit by the university management, politicization in awarding maintenance contract, and lack of proper monitoring of the maintenance contract awarded to individuals by the university management. This finding is supported by Ndirangu & Udoto (2011), Hassanain, Sedky, Adamu & Saif (2010) and Ezeugbor and Okorji (2014) as they all found similar challenges to the ones mentioned above.

CONCLUSION

This study examined the effects of management of physical resources for quality education delivery in Ignatius Ajuru University of Education. The empirical results succinctly showed that the extent of provision of physical resources is quite low for quality education delivery in Ignatius Ajuru University of Education (IAUOE). The study also revealed that extent of maintenance of physical resources is quite low for quality education delivery in Ignatius Ajuru University of Education. The study equally reported that inadequate financial resources for the provision and maintenance of physical resources, mismanagement and misappropriation of the available funds, embezzlement of funds met for the provision and maintenance of resources, lack of skilled personnel to carry out maintenance activities, constant interference on the activities of the maintenance unit by the university management, politicization in awarding maintenance contract,

and lack of proper monitoring of the maintenance contract awarded to individuals by the university management, are the major challenges to effective management of physical resources in IAUOE

RECOMMENDATIONS

Based on the findings and conclusion, the following recommendations are provided:

1. That, the Rivers State Government should provide adequate physical resources such as instructional, recreational and residential facilities in Ignatius Ajuru University of Education as it would enhance quality education delivery in the institution..
2. That, the Rivers State Government should release funds to the management of IAUOE for infrastructural development as it would enhance quality education delivery in the university.
3. That, the management of IAUOE should implement good maintenance culture on the available resources as this would help to ensure quality education delivery in the institution.
4. That, the management of IAUOE should award maintenance contract to competent individuals and companies instead of politizing contract awarding process as this would improve the maintenance performance of the institution.
5. The management of Ignatius Ajuru University of Education should on their own part increase their sources of revenue through internally generation of funds, and embrace Public-Private Partnership as this would enable them augment the state government subvention for the provision and management of physical resources.

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